

## ACEHR Update – USGS NEHRP Programs – July 2017

Overall, the current picture is relatively positive for USGS NEHRP activities:

- FY17 appropriation: continued support for CEUSN and +\$2.0M for EEW
  - asked for an “implementation plan” for USArray in Alaska
- FY18 House Appropriations Committee “mark” is at the FY17 funding level
  - House prioritizes EEW, CEUSN, ANSS regional networks

Seismic Networks (ANSS, GSN):

- Central and Eastern U.S. Seismic Network (CEUSN): USGS will fund FY18 operations through IRIS. No decision yet on FY19 and beyond
- Alaska Transportable Array – Congress asked for an “implementation plan” for retaining some or all of USArray in Alaska; we expect continued interest in long-term funding.
- Global Seismographic Network (GSN) borehole sensor installations:
  - at “flat” funding, deployment plan from the USGS Albuquerque Seismological Laboratory (ASL) calls for 4-5 years to install all new sensors and upgrade the degraded vaults. This could be accelerated significantly with just one more contract employee (i.e., beyond current budget)

Hazard Assessment Activities:

- SESAC subcommittee on the National Seismic Hazard Model (NSHM) met in June, 2017 (Ralph Archuleta joined this meeting). Recommendations:
  - One-year induced seismicity forecast: positively received; update requested.
  - Updates to Alaska and Puerto Rico models should wait until subduction zone ground motion model is completed; Hawaii update may proceed.
  - Operational Earthquake Forecasting OEF development is a low priority.
- EHP will increase project staffing in FY18 by one scientist.

Research Activities:

- Aftershock forecast tool is completed and in testing. Goal is to move the web interface (currently in “beta”) to operations, with aftershock forecasts a new product of ANSS.

Strategic Planning:

- Program-sector strategic plans completed or in-development:
  - ANSS (published), Geodesy (in publication), Strong motion (completed); Central and Eastern U.S. (in development), induced seismicity (being updated), NEIC (begun).

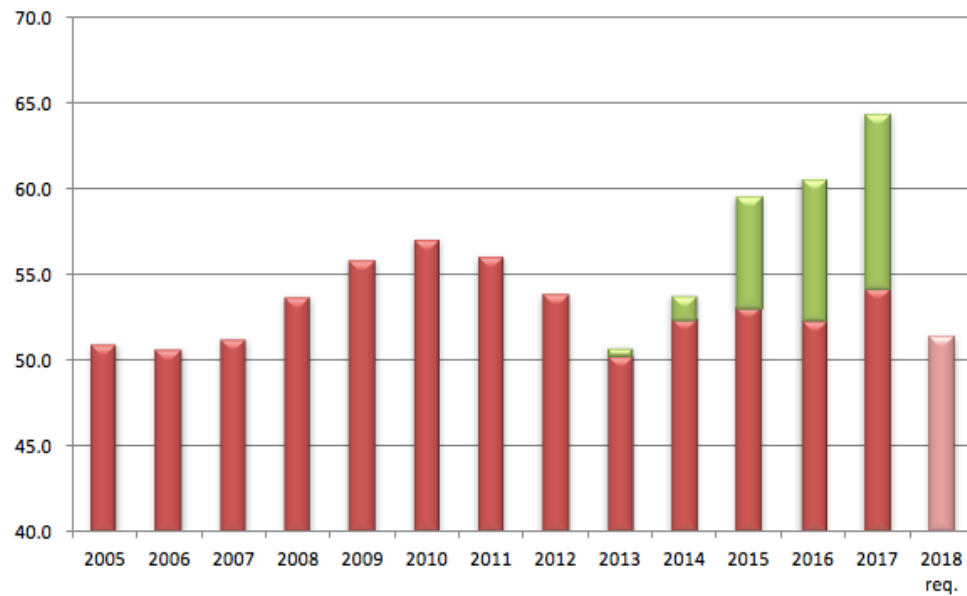
Future direction: Subduction Zone Science

- USGS published a new Subduction Zone Science Plan (USGS Circular 1428)
- NSF received community proposal, SZ4D, detailing a proposed subduction zone observatory.

Continuing Issues:

- EHP funding, outside of earthquake early warning, is at FY08 level (see graph)
- Move of the Earthquake Science Center from Menlo Park to Moffitt Field is largely on-track; first group of employees to move next year. Move of the N. Calif. seismic network and the rock labs is still unfunded.

**USGS Earthquake Hazards Program, Funding \$M**



Annual funding for the USGS Earthquake Hazards Program (\$million), since 2005. Green bars show the amount of funding directed by Congress for the development of an earthquake early warning system for the U.S. West coast (“ShakeAlert). Red bars show the amounts for “core” program activities. FY17 funding is about the same as the FY08 level, less inflation. The FY19 amount is the President’s request for the program, which does not include funds for ShakeAlert implementation.